

REMARKS

This amendment is intended to place the subject application in condition for allowance. Specifically, Claims 1 and 2 were amended to introduce an indicator feature in Claim 1 that was originally introduced in Claim 2. In addition, Claims 15-30 were cancelled. And finally, new Claims 31-33 were added to better claim the applicant's invention. In view of these amendments and the following reasoning for allowance, the applicant hereby respectfully requests further examination and reconsideration of the subject application.

1. Interview Summary

A telephonic interview was held on June 17, 2008 between the undersigned and Examiner T. J. Weidner. During this interview, the applicant's position with regard to the cited Balfanz reference was discussed. This position is repeated below. The Examiner suggested bringing an indicator feature originally introduced in Claim 2 into Claim 1. This suggested change is now reflected in amended Claims 1 and 2. No agreement was reached as to whether these changes make the remaining claims patentable over the cited art, but the Examiner stated he would consider them once formalized in a response to the aforementioned Office Action.

2. The Section 112, Second Paragraph, Rejections of Claims 1-22 and 24-29

With regard to remaining Claims 1-14, these claims were rejected under 35 USC 112, second paragraph, as being indefinite. More particularly, the Examiner first states that:

“the claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors”.

The applicant respectfully disagrees that the claims are narrative and indefinite, or that they do not conform to current U.S. practice. The claims are not literal translations into English from a foreign document. In addition, the applicant is unable to find any instances of grammatical or idiomatic errors. If the Examiner still believes such errors exist, it is respectfully requested they be specifically pointed out so that corrections can be made.

The Examiner also states that “the limitation “type” is not clearly defined in the specification”. The applicant respectfully disagrees that the term “type” is unclear.

The specification of the subject application clearly states on Page 16, starting at line 4 that:

“the signature of a device can indicate several things such as the type of device, that it is a device connected to the same local network as the discovering device, and simply that the device is present in the space. While the latter two items can be assumed to be inherent in the fact that a device is transmitting a signature within the space, **the first item can require that some unique identifier be used that distinguishes the device from all other discoverable devices in the space.** Ideally, the unique identifier representing a device’s signature would be made as small as possible, and a prescribed list of identifiers each identifying its corresponding device would be known to all the devices capable of discovering other devices in the space.

Thus, the “type” of electronic device is first defined as one that can be distinguished from all other discoverable devices in the space. In addition, the specification provides several examples of specific device types, such as a whiteboard camera (Page 17, line 5) and a 360 degree camera (Page 17, line 15). Granted, the foregoing excerpt and instances of example device types were described in connection with infrared-based discovery. However, it is further stated on Page 19, starting at line 14 that in connection with audio-based discovery:

“It is noted that the signature transmitted by the device being discovered would have the same attributes as the one employed in the previously-described IR-based discovery technique”.

Accordingly, it is believed the rejected claims fulfill the requirements of 35 USC 112, second paragraph, as they particularly point out and distinctly claim the subject matter that the applicants regard as the invention. Therefore, it is respectfully requested that the rejection of remaining Claims 1-14 be reconsidered.

It is further noted that new Claim 33 includes the “type” term, but is considered definite for the same reasons proffered above in connection with Claims 1-14.

3. The Rejection of Claims 1-3, 10-12 and 24-28 Under 35 USC §102(b)

Claims 1-3, 10-12 and 24-28 were rejected under 35 USC §102(e) as being anticipated by Balfanz et al., U.S. Patent Application Publication No. 2003/0149874. The Office Action asserted that Balfanz discloses each and every element of the applicant’s claimed invention. In regard to remaining Claims 1-3 and 10-12 (and new Claim 33 which is similar to cancelled Claim 25), the applicant respectfully disagrees with the contention of anticipation.

The applicant now claims a system in which **the discovering electronic device receives “a signature signal transmitted by a one of said one or more discoverable electronic devices, wherein the signature signal comprises an indicator representing a signature of the discoverable device indicative of its presence in the delimited space, its being accessible via said network, and what type of discoverable electronic device transmitted the signature signal”**. The discovering device then **transmits “a request signal for receipt by the discoverable electronic device whose signature was received which requests the address assigned to that discoverable device on the network** to be transmitted to the discovering device”. In reply to the

request, the discovering device then receives **“a reply signal transmitted by the discoverable electronic device whose signature was received which comprises data representing the requested network address”**.

Balfanz, on the other hand, teaches a scheme in which a first device sends a public key (or a representation thereof) to a second device in a first transmission via a location-limited channel. This first transmission may optionally include other information such as a network address of the first device. The second device then receives this first transmission and in response sends its public key (or a representation thereof) to the first device in a second transmission. This second transmission may include the network address of the second device. (see Fig. 5 and its description in paragraphs [0048] through [0051]).

Accordingly, Balfanz does not teach a discovering device receiving the claimed **“signature signal transmitted by a one of said one or more discoverable electronic devices, wherein the signature signal comprises an indicator representing a signature of the discoverable device indicative of its presence in the delimited space, its being accessible via said network, and what type of discoverable electronic device transmitted the signature signal”**. Rather, the Balfanz scheme calls for the receipt of a first transmission of a public key (or a representation thereof), which might include a network address. Even if this first transmission did not include the network address and were equated to the claimed **“signature signal comprises an indicator representing a signature of the discoverable device indicative of its presence in the delimited space, its being accessible via said network, and what type of discoverable electronic device transmitted the signature signal”**, the next transmission is from the receiving (second) device to the sending (first) device and includes its public key and possibly its network address. This in no way teaches the discovering devices claimed transmission of **“a request signal...which requests the address assigned to that discoverable device on the network to be transmitted to the discovering device”**. Further, even if for argument sake it was supposed that the Balfanz transmission by the first device of a public key (or a representation thereof) corresponded to the applicant's claimed “request signal”, and the response transmission from the second device

corresponded to the claimed **“reply signal transmitted by the discoverable electronic device...which comprises data representing the requested network address”**, this means the Balfanz scheme still lacks the claimed **“signature signal”**. It is also noted that the Examiner’s suggestion that the claimed signature and request signals are combined in Balfanz based on the use of a Digital Signature Algorithm (DSA) public key (paragraph [0082]) is not supportable. In accordance with the claimed elements, the signature signal is transmitted by a discoverable device and the request signal is transmitted by a different device (namely the discovering device). Thus, these two signals could not be combined into a single transmission from a single device as purportedly taught in Balfanz.

It is further noted that the claimed signature signal includes an indicator that among other things identifies the type of electronic device sending the signature signal. Balfanz’s transmissions lack such an indicator.

Thus, no matter how the teachings of Balfanz are interpreted to correspond to the elements of the rejected claims, some element would still be missing. The Balfanz scheme simply does not include each of the claimed “signature signal”, “request signal” and “reply signal”.

A prima facie case of anticipation is established only when the Examiner can show that the cited reference teaches each of the claimed elements of a rejected claim. In this case, based on the remarks presented above, the Examiner has not shown that the Balfanz reference teaches the subject application’s aforementioned claimed signal features. Thus, the rejected claims recite features that are not taught in the cited art, and as such, a prima facie case of anticipation cannot be established. Accordingly, it is respectfully requested that the rejection of remaining Claims 1-3 and 10-12 be reconsidered based on the following novel language exemplified in Claim 1:

“receive a signature signal transmitted by a one of said one or more discoverable electronic devices, wherein the signature signal comprises an indicator representing a signature of the discoverable device indicative

of its presence in the delimited space, its being accessible via said network, and what type of discoverable electronic device transmitted the signature signal, transmit a request signal for receipt by the discoverable electronic device whose signature was received which requests the address assigned to that discoverable device on the network to be transmitted to the discovering device, and receive a reply signal transmitted by the discoverable electronic device whose signature was received which comprises data representing the requested network address, wherein the signature, request and reply signals are not transmitted via the network and are transmitted in a manner that substantially limits their reception to the delimited space”.

4. The Rejection of Claims 4-9, 13, 14 and 29 Under 35 USC §103(a)

Claims 4-9 were rejected under 35 USC 103(a) as being obvious over Balfanz in view of Tewfik et al., U.S. Patent No. 6,061,793. It was contended in the Office Action that Balfanz teaches all the elements of the rejected claims with the exception of the use of a low-amplitude audio signal embedded in the form of an audio watermark or obtaining information from the audio watermark. However, it is further contended that the Tewfik reference teaches this feature. Thus, it was concluded that it would have been obvious to incorporate the Tewfik teachings into Balfanz to produce the applicant's claimed invention. Additionally, Claims 13, 14 and 29 were rejected under 35 USC 103(a) as being obvious over Balfanz. It was contended in the Office Action that Balfanz teaches all the elements of the rejected claims with the exception of a confirmation actuator that must be activated before sending signals. However, official notice was taken that a power conserving on/off switch is typically found on electronic devices. Thus, it was concluded that it would have been obvious to incorporate an on/off button on the Balfanz devices that must be activated before transmitting signals, thereby producing the applicant's claimed invention. The applicant respectfully disagrees with these contentions of obviousness.

In regard to the remaining Claims 4-9, 13 and 14, as stated previously, Balfanz

does not teach a discovering device receiving the claimed **“signature signal transmitted by a one of said one or more discoverable electronic devices, wherein the signature signal comprises an indicator representing a signature of the discoverable device indicative of its presence in the delimited space, its being accessible via said network, and what type of discoverable electronic device transmitted the signature signal”**. Rather, the Balfanz scheme calls for the receipt of a first transmission of a public key (or a representation thereof), which might include a network address. Even if this first transmission did not include the network address and were equated to the claimed **“signature signal comprises an indicator representing a signature of the discoverable device indicative of its presence in the delimited space, its being accessible via said network, and what type of discoverable electronic device transmitted the signature signal”**, the next transmission is from the receiving (second) device to the sending (first) device and includes its public key and possibly its network address. This in no way teaches the discovering devices claimed transmission of **“a request signal...which requests the address assigned to that discoverable device on the network to be transmitted to the discovering device”**. Further, even if for argument sake it was supposed that the Balfanz transmission by the first device of a public key (or a representation thereof) corresponded to the applicant's claimed “request signal”, and the response transmission from the second device corresponded to the claimed **“reply signal transmitted by the discoverable electronic device...which comprises data representing the requested network address”**, this means the Balfanz scheme still lacks the claimed **“signature signal”**. It is also noted that the Examiner's suggestion that the claimed signature and request signals are combined in Balfanz based on the use of a Digital Signature Algorithm (DSA) public key (paragraph [0082]) is not supportable. In accordance with the claimed elements, the signature signal is transmitted by a discoverable device and the request signal is transmitted by a different device (namely the discovering device). Thus, these two signals could not be combined into a single transmission from a single device as purportedly taught in Balfanz. It is further noted that the claimed signature signal includes an indicator that among other things identifies the type of electronic device sending the signature signal. Balfanz's transmissions lack such an indicator.

The Tewfik reference also lacks any teaching of the applicant's claimed signal elements. Thus, the Balfanz-Tewfik combination lacks a teaching of the claimed signal elements.

In order to deem the applicant's claimed invention unpatentable under 35 USC §103, a prima facie showing of obviousness must be made. To make a prima facie showing of obviousness, all of the claimed elements of an applicant's invention must be considered, especially when they are missing from the prior art. If a claimed element is not taught in the prior art and has advantages not appreciated by the prior art, then no prima facie case of obviousness exists. The Federal Circuit court has stated that it was error not to distinguish claims over a combination of prior art references where a material limitation in the claimed system and its purpose was not taught therein (*In Re Fine*, 837 F.2d 107, 5 USPQ2d 1596 (Fed. Cir. 1988)).

The cited combination lacks a teaching of the applicants' aforementioned claimed signal elements. The cited combination also fails to recognize the advantages of these elements. For example, the combination does not recognize the value of having a separate signature signal transmitted by discoverable devices and a request signal transmitted by the discovering device so that the discovering device can make a specific request for a network address to a specific discoverable device. Thus, the applicants have claimed a feature not taught in the cited combination, and which has advantages not recognized therein. Accordingly, no prima facie case of obviousness can be established in accordance with the holding of *In Re Fine*. This lack of a prima facie showing of obviousness means that the rejected claims are patentable under 35 USC §103(a). It is, therefore, respectfully requested that the rejection of Claims 4-9, 13 and 14 be reconsidered based on the previously-quoted non-obvious claim language exemplified in Claim 1.

In further regard to the remaining Claim 14, the applicant respectfully traverses the contention that the addition of an on/off switch in the Balfanz devices makes the claimed

"confirmation actuator" obvious. Claim 14 recites that the "a person must activate the confirmation actuator on a discoverable device having one before that discoverable device will transmit the reply signal". As the reply signal is sent in reply to a request signal, it is the applicant's position that the electronic device must necessarily be on in order for it to receive the claimed request signal. Given that the electronic device is already on, if the on/off switch were equated to the claimed confirmation actuator, the only thing a person could do is turn off the electronic device, not activate the switch to transmit the reply signal. Thus, it is respectfully requested that the rejection of Claim 14 be reconsidered based on this reasoning as well.

5. The Rejection of Claims 15-22 Under 35 USC §103(a)

Claims 15-22 were rejected under 35 USC 103(a) as being obvious over Balfanz. While no admission is made that the rejected claims are actually obvious over Balfanz, the applicant has elected to cancel these claims to further the prosecution of the subject application and expedite its allowance.

6. Summary

In view of the amendments and arguments set forth above, the applicant respectfully submits that remaining Claims 1-14, as well as new Claims 31-33, are in condition for allowance as they particularly point out and distinctly claim the subject matter which the applicant regards as the invention, and are novel and non-obvious over the cited art. Accordingly, further examination and reconsideration of these claims is respectfully requested and allowance of at an early date is courteously solicited.

Respectfully submitted,



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